Nateglinide-d_5

Cat. No.: HY-B0422S

CAS No.: 1227666-13-8

Molecular Formula: $C_{19}H_{22}D_5NO_3$

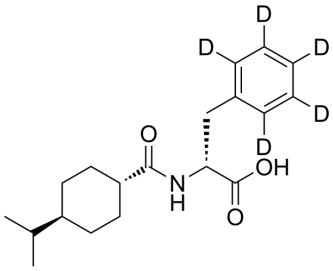
Molecular Weight: 322.45

Target: Potassium Channel; Dipeptidyl Peptidase

Pathway: Membrane Transporter/Ion Channel; Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (310.13 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1013 mL	15.5063 mL	31.0126 mL
	5 mM	0.6203 mL	3.1013 mL	6.2025 mL
	10 mM	0.3101 mL	1.5506 mL	3.1013 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Nateglinide-d_5 is a deuterium labeled Nateglinide. Nateglinide, a D-phenylalanine derivative, is an orally active and short-acting insulinotropic agent and a DPP IV inhibitor. Nateglinide inhibits ATP-sensitive K+ channels in pancreatic β-cells. Nateglinide is used for the treatment of type 2 (non-insulin-dependent) diabetes mellitus[1][2].

IC_{50} & Target

DPP-4

REFERENCES

[1]. Christopher J. Dunn, et al. Nateglinide. OFILE Drugs 2000 Sep: 60 (3): 6.

[2]. Shiling Hu, et al. Interaction of nateglinide with KATP channel in h-cells underlies its unique insulinotropic action. European Journal of Pharmacology. 442 (2002) 163-171.

[3]. Jian Luo, et al. Evaluating insulin secretagogues in a humanized mouse model with functional human islets. Metabolism. 2013 Jan;62(1):90-9.

[4]. Duffy NA, et al. Effects of antidiabetic drugs on dipeptidyl peptidase IV activity: nateglinide is an inhibitor of DPP IV and augments the antidiabetic activity of glucagon-like peptide-1. Eur J Pharmacol. 2007 Jul 30;568(1-3):278-86.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA